

Appln. No. 09/700,751  
Amdt. dated August 30, 2005  
Reply to Office action of June 8, 2005

Amendments to the Claims:

This listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-40 (Cancelled) .

41 (Currently Amended) . A method for selectively inhibiting abnormal cell proliferation in a subject in need thereof, comprising administering to the subject an amount of an A3-selective adenosine A3 receptor agonist (A3RAg), in a manner such that it exerts its prime effect through the adenosine A3 receptor, the amount being less than 100 µg/Kg body weight ~~effective to selectively inhibit abnormal cell proliferation.~~

42 (Original) . A method according to Claim 41, for inhibiting growth or proliferation of tumor cells.

43 (Cancelled)

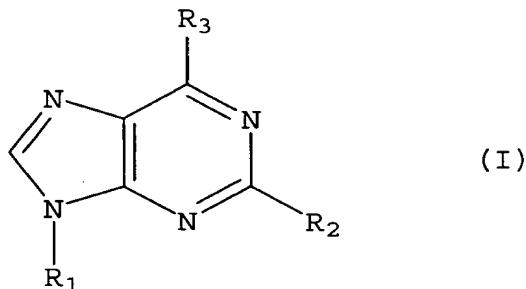
44 (Previously Presented) . A method according to Claim 41, wherein the drug is administered orally.

45 (Original) . A method according to Claim 41, wherein the drug is administered in combination with a chemotherapeutic drug.

46 (Previously Presented) . A method according to Claim 41, wherein said active ingredient is an A3-selective

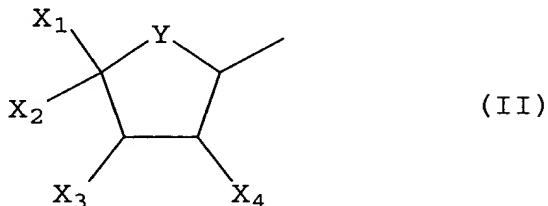
Appln. No. 09/700,751  
Amdt. dated August 30, 2005  
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A3RAg that is a nucleoside derivative of the following general formula (I) :



wherein

- R<sub>1</sub> is C<sub>1</sub>-C<sub>10</sub> alkyl, C<sub>1</sub>-C<sub>10</sub> hydroxyalkyl, C<sub>1</sub>-C<sub>10</sub> carboxyalkyl or C<sub>1</sub>-C<sub>10</sub> cyanoalkyl or a group of the following general formula (II) :



in which:

- Y is an oxygen or sulfur atom or CH<sub>2</sub>;  
- X<sub>1</sub> is H, C<sub>1</sub>-C<sub>10</sub> alkyl, R<sup>a</sup>R<sup>b</sup>NC(=O)- or HOR<sup>c</sup>-, wherein R<sup>a</sup> and R<sup>b</sup> may be the same or different and are selected from the group consisting of hydrogen, C<sub>1</sub>-C<sub>10</sub> alkyl, amino, C<sub>1</sub>-C<sub>10</sub> haloalkyl, C<sub>1</sub>-C<sub>10</sub> aminoalkyl, C<sub>1</sub>-C<sub>10</sub> BOC-aminoalkyl, and C<sub>3</sub>-C<sub>10</sub> cycloalkyl or are joined together to form a heterocyclic ring containing two to five carbon atoms, and R<sup>c</sup> is selected from

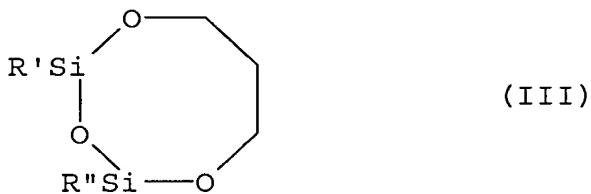
Amdt. dated August 30, 2005

Reply to Office action of June 8, 2005

the group consisting of C<sub>1</sub>-C<sub>10</sub> alkyl, amino, C<sub>1</sub>-C<sub>10</sub> haloalkyl, C<sub>1</sub>-C<sub>10</sub> aminoalkyl, C<sub>1</sub>-C<sub>10</sub> BOC-aminoalkyl, and C<sub>3</sub>-C<sub>10</sub> cycloalkyl;

- X<sub>2</sub> is H, hydroxyl, C<sub>1</sub>-C<sub>10</sub> alkylamino, C<sub>1</sub>-C<sub>10</sub> alkylamido or C<sub>1</sub>-C<sub>10</sub> hydroxyalkyl;

- X<sub>3</sub> and X<sub>4</sub> each independently are hydrogen, hydroxyl, amino, amido, azido, halo, alkyl, alkoxy, carboxy, nitrilo, nitro, trifluoro, aryl, alkaryl, thio, thioester, thioether, -OCOPh, -OC(=S)OPh or both X<sub>3</sub> and X<sub>4</sub> are oxygen connected to >C=S to form a 5-membered ring, or X<sub>2</sub> and X<sub>3</sub> form the ring of formula (III):

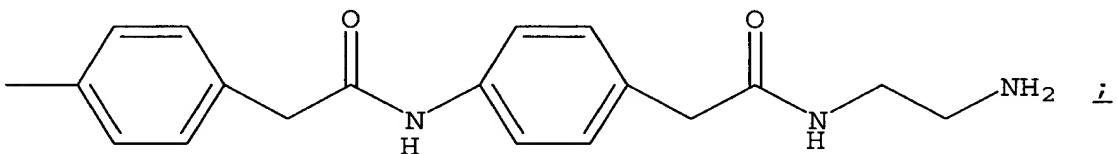


where R' and R'' are independently C<sub>1</sub>-C<sub>10</sub> alkyl;

- R<sub>2</sub> is selected from the group consisting of hydrogen, halo, C<sub>1</sub>-C<sub>10</sub> alkylether, amino, hydrazido, C<sub>1</sub>-C<sub>10</sub> alkylamino, C<sub>1</sub>-C<sub>10</sub> alkoxy, C<sub>1</sub>-C<sub>10</sub> thioalkoxy, pyridylthio, C<sub>2</sub>-C<sub>10</sub> alkenyl; C<sub>2</sub>-C<sub>10</sub> alkynyl, thio, and C<sub>1</sub>-C<sub>10</sub> alkylthio; and

- R<sub>3</sub> is a -NR<sub>4</sub>R<sub>5</sub> group with R<sub>4</sub> being hydrogen, alkyl, substituted alkyl or aryl-NH-C(Z)-, with Z being O, S or NR<sup>a</sup>, and, when R<sub>4</sub> is hydrogen, R<sub>5</sub> being selected from the group consisting of R- and S-1-phenylethyl, benzyl, phenylethyl or anilide groups, each said group being unsubstituted or substituted in one or more positions with a substituent

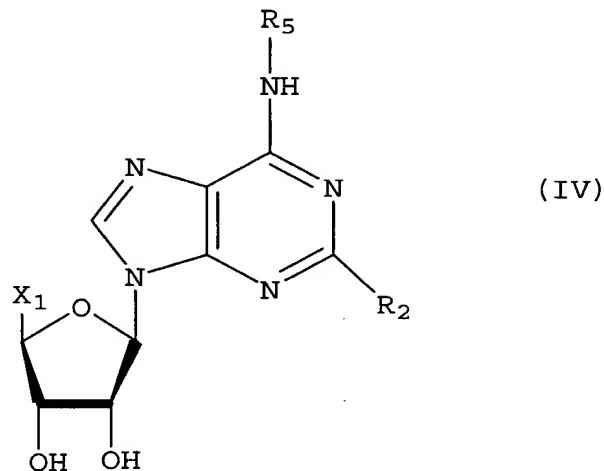
selected from the group consisting of C<sub>1</sub>-C<sub>10</sub> alkyl, amino, halo, C<sub>1</sub>-C<sub>10</sub> haloalkyl, nitro, hydroxyl, acetamido, C<sub>1</sub>-C<sub>10</sub> alkoxy, and sulfonic acid or a salt thereof; or R<sub>5</sub> being benzodioxanemethyl, fururyl, L-propylalanylaminobenzyl,  $\beta$ -alanylaminobenzyl, T-BOC- $\beta$ -alanylaminobenzyl, phenylamino, carbamoyl, phenoxy or C<sub>1</sub>-C<sub>10</sub> cycloalkyl; or R<sub>5</sub> being a group of the following formula:



or, when R<sub>4</sub> is alkyl, substituted alkyl, or aryl-NH-C(Z)-, then R<sub>5</sub> being selected from the group consisting of substituted or unsubstituted heteroaryl-NR<sup>a</sup>-C(Z), heteroaryl-C(Z)-, alkaryl-NR<sup>a</sup>-C(Z)-, alkaryl-C(Z)-, aryl-NR-C(Z)- and aryl-C(Z);

or a suitable salt of the compound defined above.

47 (Previously Presented). A method according to Claim 46, wherein said active ingredient is an A3-selective A3RAg that is a nucleoside derivative of the general formula (IV) :



in which  $X_1$ ,  $R_2$  and  $R_5$  are as defined in Claim 46.

48 (Original). A method according to Claim 47, wherein said active ingredient is an  $N^6$ -benzyladenosine-5'-uronamide.

49 (Previously Presented). A method according to Claim 48, wherein said active ingredient is selected from the group consisting of  $N^6$ -2-(4-aminophenyl)ethyladenosine (APNEA),  $N^6$ -(4-amino-3-iodobenzyl)adenosine-5'-( $N$ -methyluronamide) (AB-MECA) and 1-deoxy-1-{6-[({3-iodophenyl}methyl)amino]-9H-purine-9-yl}- $N$ -methyl- $\beta$ -D-ribofuranuronamide (IB-MECA) and 2-chloro- $N^6$ -(3-iodobenzyl)adenosine-5'- $N$ -methyluronamide (Cl-IB-MECA).

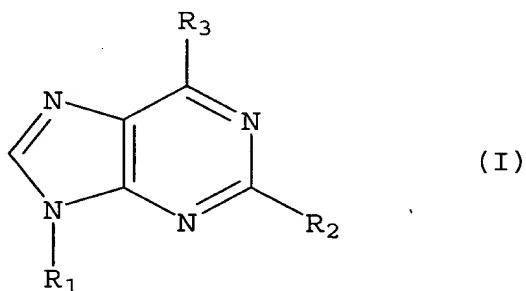
50 (Currently Amended). A method for treating cancer in a subject in need thereof, which subject is undergoing chemotherapeutic drug treatment, comprising administering to the subject an amount of an A3-selective

adenosine A3 receptor agonist (A3RAg), in a manner such that it exerts its prime effect through the adenosine A3 receptor, the amount being effective to both selectively inhibit proliferation of cancer cells and to counter toxic side effects of chemotherapeutic drug treatment of the same subject, wherein said amount is less than 100  $\mu\text{g}/\text{Kg}$  body weight.

51 (Currently Amended). A method according to Claim 50, wherein the A3RAg synergizes with said chemotherapeutic drug to yield a stronger anti-tumor effect.

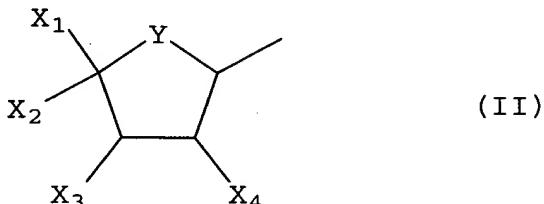
52 (Original). A method according to Claim 50, wherein the drug is administered orally.

53 (Previously Presented). A method according to Claim 50, wherein said active ingredient is an A3-selective A3RAg that is a nucleoside derivative of the following general formula (I):



wherein

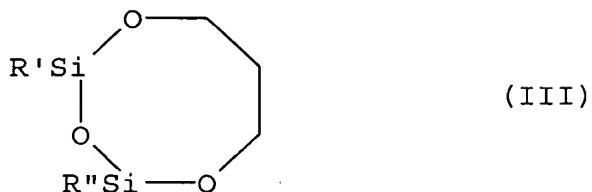
- R<sub>1</sub> is C<sub>1</sub>-C<sub>10</sub> alkyl, C<sub>1</sub>-C<sub>10</sub> hydroxyalkyl, C<sub>1</sub>-C<sub>10</sub> carboxyalkyl or C<sub>1</sub>-C<sub>10</sub> cyanoalkyl or a group of the following general formula (II) :



in which:

- Y is an oxygen or sulfur atom or CH<sub>2</sub>;
- X<sub>1</sub> is H, C<sub>1</sub>-C<sub>10</sub> alkyl, R<sup>a</sup>R<sup>b</sup>NC(=O)- or HOR<sup>c</sup>-, wherein R<sup>a</sup> and R<sup>b</sup> may be the same or different and are selected from the group consisting of hydrogen, C<sub>1</sub>-C<sub>10</sub> alkyl, amino, C<sub>1</sub>-C<sub>10</sub> haloalkyl, C<sub>1</sub>-C<sub>10</sub> aminoalkyl, C<sub>1</sub>-C<sub>10</sub> BOC-aminoalkyl, and C<sub>3</sub>-C<sub>10</sub> cycloalkyl or are joined together to form a heterocyclic ring containing two to five carbon atoms, and R<sup>c</sup> is selected from the group consisting of C<sub>1</sub>-C<sub>10</sub> alkyl, amino, C<sub>1</sub>-C<sub>10</sub> haloalkyl, C<sub>1</sub>-C<sub>10</sub> aminoalkyl, C<sub>1</sub>-C<sub>10</sub> BOC-aminoalkyl, and C<sub>3</sub>-C<sub>10</sub> cycloalkyl;
- X<sub>2</sub> is H, hydroxyl, C<sub>1</sub>-C<sub>10</sub> alkylamino, C<sub>1</sub>-C<sub>10</sub> alkylamido or C<sub>1</sub>-C<sub>10</sub> hydroxyalkyl;
- X<sub>3</sub> and X<sub>4</sub> each independently are hydrogen, hydroxyl, amino, amido, azido, halo, alkyl, alkoxy, carboxy, nitrilo, nitro, trifluoro, aryl, alkaryl, thio, thioester, thioether, -OCOPh, -OC(=S)OPh or both X<sub>3</sub> and X<sub>4</sub> are oxygen

connected to >C=S to form a 5-membered ring, or X<sub>2</sub> and X<sub>3</sub> form the ring of formula (III):



where R' and R'' are independently C<sub>1</sub>-C<sub>10</sub> alkyl;

- R<sub>2</sub> is selected from the group consisting of hydrogen, halo, C<sub>1</sub>-C<sub>10</sub> alkylether, amino, hydrazido, C<sub>1</sub>-C<sub>10</sub> alkylamino, C<sub>1</sub>-C<sub>10</sub> alkoxy, C<sub>1</sub>-C<sub>10</sub> thioalkoxy, pyridylthio, C<sub>2</sub>-C<sub>10</sub> alkenyl; C<sub>2</sub>-C<sub>10</sub> alkynyl, thio, and C<sub>1</sub>-C<sub>10</sub> alkylthio; and

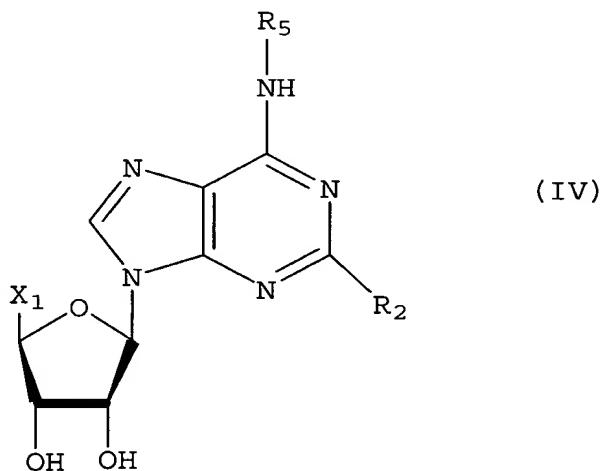
- R<sub>3</sub> is a -NR<sub>4</sub>R<sub>5</sub> group with R<sub>4</sub> being hydrogen, alkyl, substituted alkyl or aryl-NH-C(Z)-, with Z being O, S or NR<sup>a</sup>, and, when R<sub>4</sub> is hydrogen, R<sub>5</sub> being selected from the group consisting of R- and S-1-phenylethyl, benzyl, phenylethyl or anilide groups, each said group being unsubstituted or substituted in one or more positions with a substituent selected from the group consisting of C<sub>1</sub>-C<sub>10</sub> alkyl, amino, halo, C<sub>1</sub>-C<sub>10</sub> haloalkyl, nitro, hydroxyl, acetamido, C<sub>1</sub>-C<sub>10</sub> alkoxy, and sulfonic acid or a salt thereof; or R<sub>5</sub> being benzodioxanemethyl, fururyl, L-propylalanylaminobenzyl,  $\beta$ -alanylaminobenzyl, T-BOC- $\beta$ -alanylaminobenzyl, phenylamino, carbamoyl, phenoxy or C<sub>1</sub>-C<sub>10</sub> cycloalkyl; or R<sub>5</sub> being a group of the following formula:



or, when R<sub>4</sub> is alkyl, substituted alkyl, or aryl-NH-C(Z)-, then R<sub>5</sub> being selected from the group consisting of substituted or unsubstituted heteroaryl-NR<sup>a</sup>-C(Z), heteroaryl-C(Z)-, alkaryl-NR<sup>a</sup>-C(Z)-, alkaryl-C(Z)-, aryl-NR-C(Z)- and aryl-C(Z);

or a suitable salt of the compound defined above.

54 (Previously Presented). A method according to Claim 53, wherein said active ingredient is an A3-selective A3RAg that is a nucleoside derivative of the general formula (IV) :



in which X<sub>1</sub>, R<sub>2</sub> and R<sub>5</sub> are as defined in Claim 53.

55 (Original). A method according to Claim 54,  
wherein said active ingredient is an N<sup>6</sup>-benzyladenosine-5'-  
uronamide.

56 (Previously Presented). A method according to  
Claim 55, wherein said active ingredient is selected from the  
group consisting of N<sup>6</sup>-2-(4-aminophenyl)ethyladenosine (APNEA),  
N<sup>6</sup>-(4-amino-3-iodobenzyl)adenosine-5'-(N-methyluronamide) (AB-  
MECA) and 1-deoxy-1-{6-[{3-iodophenyl}methyl]amino}-9H-  
purine-9-yl}-N-methyl-β-D-ribofuranuronamide (IB-MECA) and 2-  
chloro-N<sup>6</sup>-(3-iodobenzyl)adenosine-5'-N-methyluronamide (Cl-IB-  
MECA).

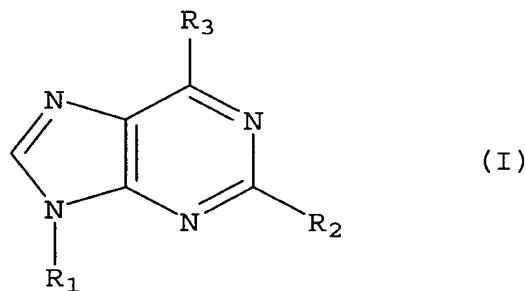
57 (Currently Amended). A method for selectively  
inhibiting abnormal cell proliferation in a subject,  
comprising administering to the subject an amount of an  
adenosine A3 receptor agonist (A3RAg) in a manner such that it  
exerts its prime effect through the A3 adenosine receptor  
without essentially activating adenosine receptors other than  
the A3 adenosine receptor, the amount being effective to  
~~selectively inhibit abnormal cell proliferation less than 100~~  
μg/Kg body weight.

58 (Currently Amended). A method according to Claim  
4157, wherein said abnormal cell proliferation is the growth  
or proliferation of tumor cells.

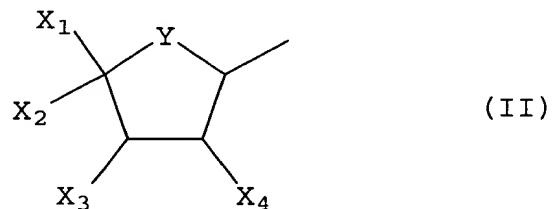
59 (Previously Presented). A method according to  
Claim 57, wherein the drug is administered orally.

60 (Previously Presented). A method according to  
Claim 57, wherein the drug is administered in combination with  
a chemotherapeutic drug.

61 (Previously Presented). A method according to  
Claim 57, wherein the active ingredient is an A3RAg that  
exerts its prime effect through the A3 adenosine receptor  
without essentially activating adenosine receptors other than  
the A3 adenosine receptor, which is a nucleoside derivative of  
the following general formula (I):



wherein R<sub>1</sub> is C<sub>1</sub>-C<sub>10</sub> alkyl, C<sub>1</sub>-C<sub>10</sub> hydroxyalkyl, C<sub>1</sub>-C<sub>10</sub> carboxyalkyl or C<sub>1</sub>-C<sub>10</sub> cyanoalkyl or a group of the following  
general formula (II):



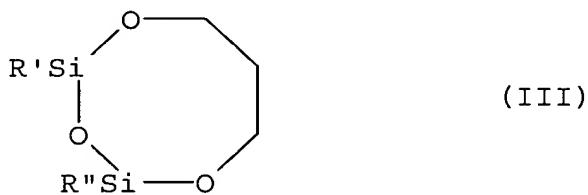
in which:

- Y is an oxygen or sulfur atom or CH<sub>2</sub>;

- X<sub>1</sub> is H, C<sub>1</sub>-C<sub>10</sub> alkyl, R<sup>a</sup>R<sup>b</sup>NC(=O)- or HOR<sup>c</sup>-, wherein R<sup>a</sup> and R<sup>b</sup> may be the same or different and are selected from the group consisting of hydrogen, C<sub>1</sub>-C<sub>10</sub> alkyl, amino, C<sub>1</sub>-C<sub>10</sub> haloalkyl, C<sub>1</sub>-C<sub>10</sub> aminoalkyl, C<sub>1</sub>-C<sub>10</sub> BOC-aminoalkyl, and C<sub>3</sub>-C<sub>10</sub> cycloalkyl or are joined together to form a heterocyclic ring containing two to five carbon atoms, and R<sup>c</sup> is selected from the group consisting of C<sub>1</sub>-C<sub>10</sub> alkyl, amino, C<sub>1</sub>-C<sub>10</sub> haloalkyl, C<sub>1</sub>-C<sub>10</sub> aminoalkyl, C<sub>1</sub>-C<sub>10</sub> BOC-aminoalkyl, and C<sub>3</sub>-C<sub>10</sub> cycloalkyl;

- X<sub>2</sub> is H, hydroxyl, C<sub>1</sub>-C<sub>10</sub> alkylamino, C<sub>1</sub>-C<sub>10</sub> alkylamido or C<sub>1</sub>-C<sub>10</sub> hydroxyalkyl;

- X<sub>3</sub> and X<sub>4</sub> each independently are hydrogen, hydroxyl, amino, amido, azido, halo, alkyl, alkoxy, carboxy, nitrilo, nitro, trifluoro, aryl, alkaryl, thio, thioester, thioether, -OCOPh, -OC(=S)OPh or both X<sub>3</sub> and X<sub>4</sub> are oxygen connected to >C=S to form a 5-membered ring, or X<sub>2</sub> and X<sub>3</sub> form the ring of formula (III):



where R' and R'' are independently C<sub>1</sub>-C<sub>10</sub> alkyl;

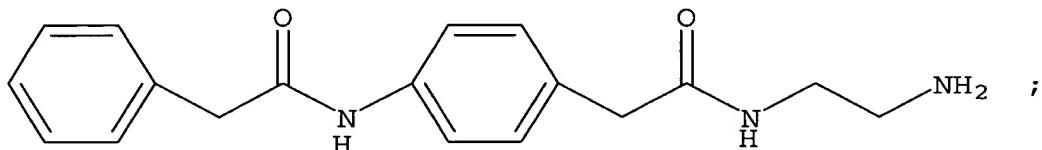
- R<sub>2</sub> is selected from the group consisting of hydrogen, halo, C<sub>1</sub>-C<sub>10</sub> alkylether, amino, hydrazido, C<sub>1</sub>-C<sub>10</sub>

Amdt. dated August 30, 2005

Reply to Office action of June 8, 2005

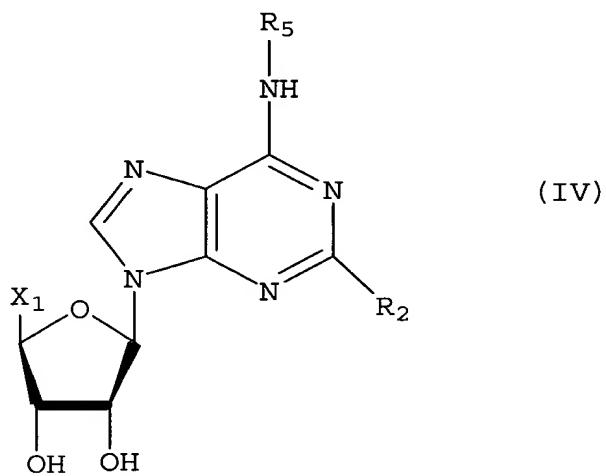
alkylamino, C<sub>1</sub>-C<sub>10</sub> alkoxy, C<sub>1</sub>-C<sub>10</sub> thioalkoxy, pyridylthio, C<sub>2</sub>-C<sub>10</sub> alkenyl, C<sub>2</sub>-C<sub>10</sub> alkynyl, thio, and C<sub>1</sub>-C<sub>10</sub> alkylthio; and

- R<sub>3</sub> is a -NR<sub>4</sub>R<sub>5</sub> group with R<sub>4</sub> being hydrogen, alkyl, substituted alkyl or aryl-NH-C(Z)-, with Z being O, S or NR<sup>a</sup>, and, when R<sub>4</sub> is hydrogen, R<sub>5</sub> being selected from the group consisting of R- and S-1-phenylethyl, benzyl, phenylethyl or anilide groups, each said group being unsubstituted or substituted in one or more positions with a substituent selected from the group consisting of C<sub>1</sub>-C<sub>10</sub> alkyl, amino, halo, C<sub>1</sub>-C<sub>10</sub> haloalkyl, nitro, hydroxyl, acetamido, C<sub>1</sub>-C<sub>10</sub> alkoxy, and sulfonic acid or a salt thereof; or R<sub>5</sub> being benzodioxanemethyl, fururyl, L-propylalanyl-aminobenzyl,  $\beta$ -alanylarnino-benzyl, T-BOC- $\beta$ -alanylaminobenzyl, phenylamino, carbamoyl, phenoxy or C<sub>1</sub>-C<sub>10</sub> cycloalkyl; or R<sub>5</sub> being a group of the following formula:



or, when R<sub>4</sub> is alkyl, substituted alkyl, or aryl-NH-C(Z)-, then R<sub>5</sub> is selected from the group consisting of substituted or unsubstituted heteroaryl-NR<sup>a</sup>-C(Z)-, heteroaryl-C(Z)-, alkaryl-NR<sup>a</sup>-C(Z)-, alkaryl-C(Z)-, aryl-NR-C(Z)- and aryl-C(Z)-; or a suitable salt of said nucleotide derivative.

62 (Previously Presented). A method according to Claim 61, wherein said active ingredient is an A3RAg that exerts its prime effect through the A3 adenosine receptor without essentially activating adenosine receptors other than the A3 adenosine receptor, which is a nucleoside derivative of the general formula (IV) :



in which X<sub>1</sub>, R<sub>2</sub> and R<sub>4</sub> are as defined in Claim 61.

63 (Currently Amended). A method according to Claim 62, wherein said active ingredient is an ~~N<sup>6</sup>-benzyladenosine-5'-uronamide~~  
N<sup>6</sup>-benzyladenosine-5'-uronamide.

64 (Previously Presented). A method according to Claim 63, wherein said active ingredient is selected from the group consisting of N<sup>6</sup>-2-(4-aminophenyl)ethyladenosine (APNEA), N<sup>6</sup>-(4-amino-3-iodobenzyl) adenosine-5'- (N-methyluronamide) (AB-MECA) and 1-deoxy-1-{6-[({3-iodophenyl} methyl)amino]-9H-purine-9-yl}-N-methyl-β-D-ribofuranuron-amide (IB-MECA) and 2-

chloro-N<sup>6</sup>- (3-iodobenzyl) -adenosine-5'-N-methly-uronamide (Cl-IB-MECA).

65 (Cancelled)

66 (Currently Amended). A method according to Claim 6557, wherein the amount is less than 50 µg/Kg body weight.

67 (Currently Amended). A method according to claim 1561, wherein said active ingredient is selected from the group consisting of:

N<sup>6</sup>- (3-iodobenzyl) -9-methyladenine;

N<sup>6</sup>- (3-iodobenzyl) -9-hydroxyethyladenine;

R-N<sup>6</sup>- (3-iodobenzyl) -9- (2,3-dihydroxypropyl) adenine;

S-N<sup>6</sup>- (3-iodobenzyl) -9- (2,3-dihydroxypropyl) adenine;

N<sup>6</sup>- (3-iodobenzyladenin-9-yl) acetic acid;

N<sup>6</sup>- (3-iodobenzyl) -9- (3-cyanopropyl) adenine;

2-chloro-N<sup>6</sup>- (3-iodobenzyl) -9-methyladenine;

2-amino-N<sup>6</sup>- (3-iodobenzyl) -9-methyladenine;

2-hydrazido-N<sup>6</sup>- (3-iodobenzyl) -9-methyladenine;

N<sup>6</sup>- (3-iodobenzyl) -2-methylamino-9-methyladenine;

2-dimethylamino-N<sup>6</sup>- (3-iodobenzyl) -9-methyladenine;

N<sup>6</sup>- (3-iodobenzyl) -9-methyl-2-propylaminoadenine;

2-hexylamino-N<sup>6</sup>- (3-iodobenzyl) -9-methyladenine;

N<sup>6</sup>- (3-iodobenzyl) -2-methoxy-9-methyladenine;

N<sup>6</sup>- (3-iodobenzyl) -9-methyl-2-methylthioadenine;

N<sup>6</sup>- (3-iodobenzyl) -9-methyl-2-(4-pyridylthio) adenine;

Appln. No. 09/700,751  
Amdt. dated August 30, 2005  
Reply to Office action of June 8, 2005

(1S,2R,3S,4R)-4-(6-amino-2-phenylethylamino-9H-purin-9-yl)cyclopentane-1,2,3-triol;

(1S,2R,3S,4R)-4-(6-amino-2-chloro-9H-purin-9-yl)cyclopentane-1,2,3-triol;

(±)-9-[2α,3α-dihydroxy-4β-(N-methylcarbamoyl)cyclopent-1β-yl)]-N<sup>6</sup>-(3-iodobenzyl)-adenine;

2-chloro-9-(2'-amino-2',3'-dideoxy-β-D-5'-methylarabino-furonamido)-N<sup>6</sup>-(3-iodobenzyl)adenine;

2-chloro-9-(2',3'-dideoxy-2'-fluoro-β-D-5'-methylarabino-furonamido)-N<sup>6</sup>-(3-iodobenzyl)adenine;

9-(2-acetyl-3-deoxy-β-D-5-methyl-ribofuronamido)-2-chloro-N<sup>6</sup>(3-iodobenzyl)adenine;

2-chloro-9-(3-deoxy-2-methanesulfonyl-β-D-5-methyl-ribofuronamido)-N<sup>6</sup>-(3-iodobenzyl)adenine;

2-chloro-9-(3-deoxy-β-D-5-methyl-ribofuronamido)-N<sup>6</sup>-(3-iodobenzyl)adenine;

2-chloro-9-(3,5-1,1,3,3-tetraisopropylidisiloxyl-β-D-5-ribofuranosyl)-N<sup>6</sup>-(3-iodobenzyl)adenine;

2-chloro-9-(2',3'-O-thiocarbonyl-β-D-5-methyl-ribofuronamido)-N<sup>6</sup>-(3-iodobenzyl)adenine;

9-(2-phenoxythiocarbonyl-3-deoxy-β-D-5-methyl-ribofuronamido)-2-chloro-N<sup>6</sup>-(3-iodobenzyl)adenine;

Appln. No. 09/700,751  
Amdt. dated August 30, 2005  
Reply to Office action of June 8, 2005

1-(6-benzylamino-9H-purin-9-yl)-1-deoxy-N,4-dimethyl- $\beta$ -D-ribofuranosiduronamide;  
2-chloro-9-(2',3'-dideoxy- $\beta$ -D-5'-methyl-ribofuronamido)-N<sup>6</sup>-benzyladenine;  
2-chloro-9-(2'-azido-2',3'-dideoxy- $\beta$ -D-5'-methyl-arabino-furonamido)-N<sup>6</sup>-benzyladenine;  
2-chloro-9-( $\beta$ -D-erythrocyclonoside)-N<sup>6</sup>-(3-iodobenzyl)adenine;  
N<sup>6</sup>-(benzodioxanemethyl)adenosine;  
1-(6-furfurylamino-9H-purin-9-yl)-1-deoxy-N-methyl- $\beta$ -D-ribofuranosiduronamide;  
N<sup>6</sup>-[3-(L-prolylamino)benzyl]adenosine-5'-N-methyluronamide;  
N<sup>6</sup>-[3-( $\beta$ -alanylarnino)benzyl]adenosine-5'-N-methyluronamide;  
N<sup>6</sup>-[3-(N-T-Boc- $\beta$ -alanylarnino)benzyl]adenosine-5'-N-methyluronamide  
6-(N'-phenylhydrazinyl)purine-9- $\beta$ -ribofuranoside-5'-N-methyluronamide;  
6-(O-phenylhydroxylarnino)purine-9- $\beta$ -ribofuranoside-5'-N-methyluronamide;  
9-( $\beta$ -D-2',3'-dideoxyerythrocyclonosyl)-N<sup>6</sup>-[(3- $\beta$ -alanylarnino)benzyl]adenosine;

Appln. No. 09/700,751  
Amdt. dated August 30, 2005  
Reply to Office action of June 8, 2005

9-( $\beta$ -D-erythrofuranoside)-2-methylamino-N<sup>6</sup>-(3-iodobenzyl)adenine;  
2-chloro-N-(3-iodobenzyl)-9-(2-tetrahydrofuryl)-9H-purin-6-amine;  
2-chloro-(2'-deoxy-6'-thio-L-arabinosyl)adenine;  
2-chloro-(6'-thio-L-arabinosyl)adenine;  
N<sup>6</sup>-(4-biphenyl-carbonylamino)-adenosine-5'-N-ethyluronamide;  
N<sup>6</sup>-(2,4-dichlorobenzyl-carbonylamino)-adenosine-5'-N-ethyluronamide;  
N<sup>6</sup>-(4-methoxyphenyl-carbonylamino)-adenosine-5'-N-ethyluronamide;  
N<sup>6</sup>-(4-chlorophenyl-carbonylamino)-adenosine-5'-N-ethyluronamide;  
N<sup>6</sup>-(phenyl-carbonylamino)-adenosine-5'-N-ethyluronamide;  
N<sup>6</sup>-(benzylcarbamoylamino)-adenosine-5'-N-ethyluronamide;  
N<sup>6</sup>-(4-sulfonamido-phenylcarbamoyl)-adenosine-5'-N-ethyluronamide;  
N<sup>6</sup>-(4-acetyl-phenylcarbamoyl)-adenosine-5'-N-ethyluronamide;  
N<sup>6</sup>-( $(R)$ - $\alpha$ -phenylethylcarbamoyl)-adenosine-5'-N-ethyluronamide;

Appn. No. 09/700,751  
Amdt. dated August 30, 2005  
Reply to Office action of June 8, 2005

$N^6$ -((S)- $\alpha$ -phenylethylcarbamoyl)-adenosine-5'-N-ethyluronamide;  
 $N^6$ -(5-methyl-isoxazol-3-yl-carbamoyl)-adenosine-5'-N-ethyluronamide;  
 $N^6$ -(1,3,4-thiadiazol-2-yl-carbamoyl)-adenosine-5'-N-ethyluronamide;  
 $N^6$ -(4-n-propoxy-phenylcarbamoyl)-adenosine-5'-N-ethyluronamide;  
 $N^6$ -bis-(4-nitrophenylcarbamoyl)-adenosine-5'-N-ethyluronamide; and  
 $N^6$ -bis-(5-chloro-pyridin-2-yl-carbamoyl)-adenosine-5'-N-ethyluronamide.

68 (Currently Amended). A method according to Claim 1662, wherein said active ingredient is an A3 selective A3RAG that is selected from the group consisting of those of formula (IV) in which:

$X_1$  is  $R^aR^bNC(=O)$ , wherein  $R^a$  and  $R^b$  may be the same or different and are selected from the group consisting of hydrogen,  $C_1-C_{10}$  alkyl, amino,  $C_1-C_{10}$  haloalkyl,  $C_1-C_{10}$  aminoalkyl, and  $C_3-C_{10}$  cycloalkyl,  $R_2$  is selected from the group consisting of hydrogen, halo,  $C_1-C_{10}$  alkoxy, amino,  $C_2-C_{10}$  alkenyl, and  $C_2-C_{10}$  alkynyl, and  $R_5$  is selected from the group consisting of R- and S-1-phenylethyl, an unsubstituted benzyl group, and a benzyl group substituted in one or more positions

Appln. No. 09/700,751  
Amdt. dated August 30, 2005  
Reply to Office action of June 8, 2005

with a substituent selected from the group consisting of C<sub>1</sub>-C<sub>10</sub> alkyl, amino, halo, C<sub>1</sub>-C<sub>10</sub> haloalkyl, nitro, hydroxy, acetamido, C<sub>1</sub>-C<sub>10</sub> alkoxy, and sulfo.

69 (Previously Presented). A method according to claim 68, wherein said active ingredient is an A3 selective A3RAG that is selected from the group consisting of those of formula (IV) in which:

R<sup>a</sup> and R<sup>b</sup> are the same or different and are selected from the group consisting of hydrogen and C<sub>1</sub>-C<sub>10</sub> alkyl, and R<sub>2</sub> is hydrogen or halo;

R<sup>a</sup> is hydrogen, R<sub>2</sub> is hydrogen and R<sub>5</sub> is unsubstituted benzyl;

R<sup>b</sup> is C<sub>1</sub>-C<sub>10</sub> alkyl or C<sub>3</sub>-C<sub>10</sub> cycloalkyl and R<sub>5</sub> in R- or S-1-phenylethyl or a benzyl substituted in one or more positions with a substituent selected from the group consisting of halo, amino, acetamido, C<sub>1</sub>-C<sub>10</sub> haloalkyl and sulfo, wherein the sulfo derivative is a salt;

R<sub>2</sub> is a C<sub>2</sub>-C<sub>10</sub> alkyne of the formula R<sup>d</sup>-C=C- where R<sup>d</sup> is a C<sub>1</sub>-C<sub>8</sub> alkyl; or

R<sub>2</sub> is a halo, C<sub>1</sub>-C<sub>10</sub> alkylamino, or C<sub>1</sub>-C<sub>10</sub> alkylthio, R<sup>a</sup> is hydrogen, R<sup>b</sup> is C<sub>1</sub>-C<sub>10</sub> alkyl and R<sub>5</sub> is a substituted benzyl.

70 (Currently Amended). A method according to Claim 1561, wherein the active ingredient is an A3 selective A3R<sub>Ag</sub> that is in the form of a triethylammonium salt.

71 (Previously Presented). A method according to claim 46, wherein said active ingredient is selected from the group consisting of:

N<sup>6</sup>- (3-iodobenzyl)-9-methyladenine;  
N<sup>6</sup>- (3-iodobenzyl)-9-hydroxyethyladenine;  
R-N<sup>6</sup>- (3-iodobenzyl)-9-(2,3-dihydroxypropyl)adenine;  
S-N<sup>6</sup>- (3-iodobenzyl)-9-(2,3-dihydroxypropyl)adenine;  
N<sup>6</sup>- (3-iodobenzyladenin-9-yl)acetic acid;  
N<sup>6</sup>- (3-iodobenzyl)-9-(3-cyanopropyl)adenine;  
2-chloro-N<sup>6</sup>- (3-iodobenzyl)-9-methyladenine;  
2-amino-N<sup>6</sup>- (3-iodobenzyl)-9-methyladenine;  
2-hydrazido-N<sup>6</sup>- (3-iodobenzyl)-9-methyladenine;  
N<sup>6</sup>- (3-iodobenzyl)-2-methylamino-9-methyladenine;  
2-dimethylamino-N<sup>6</sup>- (3-iodobenzyl)-9-methyladenine;  
N<sup>6</sup>- (3-iodobenzyl)-9-methyl-2-propylaminoadenine;  
2-hexylamino-N<sup>6</sup>- (3-iodobenzyl)-9-methyladenine;  
N<sup>6</sup>- (3-iodobenzyl)-2-methoxy-9-methyladenine;  
N<sup>6</sup>- (3-iodobenzyl)-9-methyl-2-methylthioadenine;  
N<sup>6</sup>- (3-iodobenzyl)-9-methyl-2-(4-pyridylthio)adenine;  
(1S,2R,3S,4R)-4-(6-amino-2-phenylethylamino-9H-purin-9-yl)cyclopentane-1,2,3-triol;

Appln. No. 09/700,751  
Amdt. dated August 30, 2005  
Reply to Office action of June 8, 2005

(1*S*,2*R*,3*S*,4*R*)-4-(6-amino-2-chloro-9*H*-purin-9-yl)  
cyclopentane-1,2,3-triol;  
( $\pm$ )-9-[2 $\alpha$ ,3 $\alpha$ -dihydroxy-4 $\beta$ -(N-methylcarbamoyl)cyclopent-1 $\beta$ -yl)]-N<sup>6</sup>-(3-iodobenzyl)-adenine;  
2-chloro-9-(2'-amino-2',3'-dideoxy- $\beta$ -D-5'-methyl-arabino-furonamido)-N<sup>6</sup>-(3-iodobenzyl)adenine;  
2-chloro-9-(2',3'-dideoxy-2'-fluoro- $\beta$ -D-5'-methyl-arabino-furonamido)-N<sup>6</sup>-(3-iodobenzyl)adenine;  
9-(2-acetyl-3-deoxy- $\beta$ -D-5-methyl-ribofuranamido)-2-chloro-N<sup>6</sup>(3-iodobenzyl)adenine;  
2-chloro-9-(3-deoxy-2-methanesulfonyl- $\beta$ -D-5-methyl-ribofuranamido)-N<sup>6</sup>-(3-iodobenzyl)adenine;  
2-chloro-9-(3-deoxy- $\beta$ -D-5-methyl-ribofuranamido)-N<sup>6</sup>-(3-iodobenzyl)adenine;  
2-chloro-9-(3,5-1,1,3,3-tetraisopropyldisiloxyl- $\beta$ -D-5-ribofuranosyl)-N<sup>6</sup>-(3-iodobenzyl)adenine;  
2-chloro-9-(2',3'-O-thiocarbonyl- $\beta$ -D-5-methyl-ribofuranamido)-N<sup>6</sup>-(3-iodobenzyl)adenine;  
9-(2-phenoxythiocarbonyl-3-deoxy- $\beta$ -D-5-methyl-ribofuranamido)-2-chloro-N<sup>6</sup>-(3-iodobenzyl)adenine;  
1-(6-benzylamino-9*H*-purin-9-yl)-1-deoxy-N,4-dimethyl- $\beta$ -D-ribofuranosiduronamide;

Appln. No. 09/700,751  
Amdt. dated August 30, 2005  
Reply to Office action of June 8, 2005

2-chloro-9-(2,3-dideoxy- $\beta$ -D-5-methyl-ribofuranamido)-N<sup>6</sup>-benzyladenine;  
2-chloro-9-(2'-azido-2',3'-dideoxy- $\beta$ -D-5'-methyl-arabino-furonamido)-N<sup>6</sup>-benzyladenine;  
2-chloro-9-( $\beta$ -D-erythrocycluronic acid)-N<sup>6</sup>-(3-iodobenzyl)adenine;  
N<sup>6</sup>-(benzodioxanemethyl)adenosine;  
1-(6-furfurylaminocarbonyl-9H-purin-9-yl)-1-deoxy-N-methyl- $\beta$ -D-ribofuranosiduronamide;  
N<sup>6</sup>-[3-(L-prolylamino)benzyl]adenosine-5'-N-methyluronamide;  
N<sup>6</sup>-[3-( $\beta$ -alanylaminocarbonyl)benzyl]adenosine-5'-N-methyluronamide;  
N<sup>6</sup>-[3-(N-T-Boc- $\beta$ -alanylaminocarbonyl)benzyl]adenosine-5'-N-methyluronamide  
6-(N'-phenylhydrazinyl)purine-9- $\beta$ -ribofuranoside-5'-N-methyluronamide;  
6-(O-phenylhydroxylaminocarbonyl)purine-9- $\beta$ -ribofuranoside-5'-N-methyluronamide;  
9-( $\beta$ -D-2',3'-dideoxyerythrocycluronic acid)-N<sup>6</sup>-[(3- $\beta$ -alanylaminocarbonyl)benzyl]adenosine;  
9-( $\beta$ -D-erythrocycluronic acid)-2-methylaminocarbonyl-N<sup>6</sup>-(3-iodobenzyl)adenine;

Amdt. dated August 30, 2005

Reply to Office action of June 8, 2005

2-chloro-N-(3-iodobenzyl)-9-(2-tetrahydrofuryl)-9H-purin-6-amine;

2-chloro-(2'-deoxy-6'-thio-L-arabinosyl)adenine;

2-chloro-(6'-thio-L-arabinosyl)adenine;

N<sup>6</sup>-(4-biphenyl-carbonylamino)-adenosine-5'-N-ethyluronamide;

N<sup>6</sup>-(2,4-dichlorobenzyl-carbonylamino)-adenosine-5'-N-ethyluronamide;

N<sup>6</sup>-(4-methoxyphenyl-carbonylamino)-adenosine-5'-N-ethyluronamide;

N<sup>6</sup>-(4-chlorophenyl-carbonylamino)-adenosine-5'-N-ethyluronamide;

N<sup>6</sup>-(phenyl-carbonylamino)-adenosine-5'-N-ethyluronamide;

N<sup>6</sup>-(benzylcarbamoylamino)-adenosine-5'-N-ethyluronamide;

N<sup>6</sup>-(4-sulfonamido-phenylcarbamoyl)-adenosine-5'-N-ethyluronamide;

N<sup>6</sup>-(4-acetyl-phenylcarbamoyl)-adenosine-5'-N-ethyluronamide;

N<sup>6</sup>-((R)- $\alpha$ -phenylethylcarbamoyl)-adenosine-5'-N-ethyluronamide;

N<sup>6</sup>-((S)- $\alpha$ -phenylethylcarbamoyl)-adenosine-5'-N-ethyluronamide;

Appln. No. 09/700,751  
Amdt. dated August 30, 2005  
Reply to Office action of June 8, 2005

N<sup>6</sup>- (5-methyl-isoxazol-3-yl-carbamoyl)-adenosine-5'-N-ethyluronamide;

N<sup>6</sup>- (1,3,4-thiadiazol-2-yl-carbamoyl)-adenosine-5'-N-ethyluronamide;

N<sup>6</sup>- (4-n-propoxy-phenylcarbamoyl)-adenosine-5'-N-ethyluronamide;

N<sup>6</sup>-bis- (4-nitrophenylcarbamoyl)-adenosine-5'-N-ethyluronamide; and

N<sup>6</sup>-bis- (5-chloro-pyridin-2-yl-carbamoyl)-adenosine-5'-N-ethyluronamide.

72 (Previously Presented). A method according to claim 53, wherein said active ingredient is selected from the group consisting of:

N<sup>6</sup>- (3-iodobenzyl)-9-methyladenine;

N<sup>6</sup>- (3-iodobenzyl)-9-hydroxyethyladenine;

R-N<sup>6</sup>- (3-iodobenzyl)-9-(2,3-dihydroxypropyl)adenine;

S-N<sup>6</sup>- (3-iodobenzyl)-9-(2,3-dihydroxypropyl)adenine;

N<sup>6</sup>- (3-iodobenzyladenin-9-yl)acetic acid;

N<sup>6</sup>- (3-iodobenzyl)-9-(3-cyanopropyl)adenine;

2-chloro-N<sup>6</sup>- (3-iodobenzyl)-9-methyladenine;

2-amino-N<sup>6</sup>- (3-iodobenzyl)-9-methyladenine;

2-hydrazido-N<sup>6</sup>- (3-iodobenzyl)-9-methyladenine;

N<sup>6</sup>- (3-iodobenzyl)-2-methylamino-9-methyladenine;

2-dimethylamino-N<sup>6</sup>- (3-iodobenzyl)-9-methyladenine;

Appln. No. 09/700,751  
Amdt. dated August 30, 2005  
Reply to Office action of June 8, 2005

N<sup>6</sup>- (3-iodobenzyl) -9-methyl-2-propylaminoadenine;  
2-hexylamino-N<sup>6</sup>- (3-iodobenzyl) -9-methyladenine;  
N<sup>6</sup>- (3-iodobenzyl) -2-methoxy-9-methyladenine;  
N<sup>6</sup>- (3-iodobenzyl) -9-methyl-2-(4-pyridylthio)adenine;  
(1S,2R,3S,4R)-4-(6-amino-2-phenylethylamino-9H-purin-9-yl)cyclopentane-1,2,3-triol;  
(1S,2R,3S,4R)-4-(6-amino-2-chloro-9H-purin-9-yl)cyclopentane-1,2,3-triol;  
(±)-9-[2α,3α-dihydroxy-4β-(N-methylcarbamoyl)cyclopent-1β-yl)]-N<sup>6</sup>- (3-iodobenzyl)-adenine;  
2-chloro-9-(2'-amino-2',3'-dideoxy-β-D-5'-methylarabino-furonamido)-N<sup>6</sup>- (3-iodobenzyl)adenine;  
2-chloro-9-(2',3'-dideoxy-2'-fluoro-β-D-5'-methylarabino-furonamido)-N<sup>6</sup>- (3-iodobenzyl)adenine;  
9-(2-acetyl-3-deoxy-β-D-5-methyl-ribofuronamido)-2-chloro-N<sup>6</sup>(3-iodobenzyl)adenine;  
2-chloro-9-(3-deoxy-2-methanesulfonyl-β-D-5-methylribofuronamido)-N<sup>6</sup>- (3-iodobenzyl)adenine;  
2-chloro-9-(3-deoxy-β-D-5-methyl-ribofuronamido)-N<sup>6</sup>- (3-iodobenzyl)adenine;  
2-chloro-9-(3,5-1,1,3,3-tetraisopropyldisiloxyl-β-D-5-ribofuranosyl)-N<sup>6</sup>- (3-iodobenzyl)adenine;

Appln. No. 09/700,751  
Amdt. dated August 30, 2005  
Reply to Office action of June 8, 2005

2-chloro-9-(2',3'-O-thiocarbonyl- $\beta$ -D-5-methyl-ribofuranamido)-N<sup>6</sup>-(3-iodobenzyl)adenine;  
9-(2-phenoxythiocarbonyl-3-deoxy- $\beta$ -D-5-methyl-ribofuranamido)-2-chloro-N<sup>6</sup>-(3-iodobenzyl)adenine;  
1-(6-benzylamino-9H-purin-9-yl)-1-deoxy-N,4-dimethyl- $\beta$ -D-ribofuranosiduronamide;  
2-chloro-9-(2,3-dideoxy- $\beta$ -D-5-methyl-ribofuranamido)-N<sup>6</sup>-benzyladenine;  
2-chloro-9-(2'-azido-2',3'-dideoxy- $\beta$ -D-5'-methyl-arabino-furonamido)-N<sup>6</sup>-benzyladenine;  
2-chloro-9-( $\beta$ -D-erythrocycluronamide)-N<sup>6</sup>-(3-iodobenzyl)adenine;  
N<sup>6</sup>-(benzodioxanemethyl)adenosine;  
1-(6-furfurylamino-9H-purin-9-yl)-1-deoxy-N-methyl- $\beta$ -D-ribofuranosiduronamide;  
N<sup>6</sup>-[3-(L-prolylamino)benzyl]adenosine-5'-N-methyluronamide;  
N<sup>6</sup>-[3-( $\beta$ -alanylaminobenzyl]adenosine-5'-N-methyluronamide;  
N<sup>6</sup>-[3-(N-T-Boc- $\beta$ -alanylaminobenzyl]adenosine-5'-N-methyluronamide  
6-(N'-phenylhydrazinyl)purine-9- $\beta$ -ribofuranoside-5'-N-methyluronamide;

Appln. No. 09/700,751  
Amdt. dated August 30, 2005  
Reply to Office action of June 8, 2005

6-(O-phenylhydroxylamino)purine-9- $\beta$ -ribofuranoside-  
5'-N-methyluronamide;  
9-( $\beta$ -D-2',3'-dideoxyerythrofuranosyl)-N<sup>6</sup>-[(3- $\beta$ -  
alanylarnino)benzyl]adenosine;  
9-( $\beta$ -D-erythrofuranoside)-2-methylarnino-N<sup>6</sup>-(3-  
iodobenzyl)adenine;  
2-chloro-N-(3-iodobenzyl)-9-(2-tetrahydrofuryl)-9H-  
purin-6-amine;  
2-chloro-(2'-deoxy-6'-thio-L-arabinosyl)adenine;  
2-chloro-(6'-thio-L-arabinosyl)adenine;  
N<sup>6</sup>-(4-biphenyl-carbonylarnino)-adenosine-5'-N-  
ethyluronamide;  
N<sup>6</sup>-(2,4-dichlorobenzyl-carbonylarnino)-adenosine-5'-N-  
ethyluronamide;  
N<sup>6</sup>-(4-methoxyphenyl-carbonylarnino)-adenosine-5'-N-  
ethyluronamide;  
N<sup>6</sup>-(4-chlorophenyl-carbonylarnino)-adenosine-5'-N-  
ethyluronamide;  
N<sup>6</sup>-(phenyl-carbonylarnino)-adenosine-5'-N-  
ethyluronamide;  
N<sup>6</sup>-(benzylcarbamoylarnino)-adenosine-5'-N-  
ethyluronamide;  
N<sup>6</sup>-(4-sulfonamido-phenylcarbamoyl)-adenosine-5'-N-  
ethyluronamide;

Appln. No. 09/700,751  
Amdt. dated August 30, 2005  
Reply to Office action of June 8, 2005

N<sup>6</sup>- (4-acetyl-phenylcarbamoyl)-adenosine-5'-N-ethyluronamide;  
N<sup>6</sup>- ((R)- $\alpha$ -phenylethylcarbamoyl)-adenosine-5'-N-ethyluronamide;  
N<sup>6</sup>- ((S)- $\alpha$ -phenylethylcarbamoyl)-adenosine-5'-N-ethyluronamide;  
N<sup>6</sup>- (5-methyl-isoxazol-3-yl-carbamoyl)-adenosine-5'-N-ethyluronamide;  
N<sup>6</sup>- (1,3,4-thiadiazol-2-yl-carbamoyl)-adenosine-5'-N-ethyluronamide;  
N<sup>6</sup>- (4-n-propoxy-phenylcarbamoyl)-adenosine-5'-N-ethyluronamide;  
N<sup>6</sup>-bis-(4-nitrophenylcarbamoyl)-adenosine-5'-N-ethyluronamide; and  
N<sup>6</sup>-bis-(5-chloro-pyridin-2-yl-carbamoyl)-adenosine-5'-N-ethyluronamide.

73 (Previously Presented). A method according to Claim 46, wherein the active ingredient is an A3 selective A3RAg that is in the form of a triethylammonium salt.

74 (Previously Presented). A method according to Claim 53, wherein the active ingredient is an A3 selective A3RAg that is in the form of a triethylammonium salt.

75 (Previously Presented). A method according to Claim 47, wherein said active ingredient is an A3 selective

Appln. No. 09/700,751  
Amdt. dated August 30, 2005  
Reply to Office action of June 8, 2005

A3RAg that is selected from the group consisting of those of formula (IV) in which:

X<sub>1</sub> is R<sup>a</sup>R<sup>b</sup>NC(=O), wherein R<sup>a</sup> and R<sup>b</sup> may be the same or different and are selected from the group consisting of hydrogen, C<sub>1</sub>-C<sub>10</sub> alkyl, amino, C<sub>1</sub>-C<sub>10</sub> haloalkyl, C<sub>1</sub>-C<sub>10</sub> aminoalkyl, and C<sub>3</sub>-C<sub>10</sub> cycloalkyl, R<sub>2</sub> is selected from the group consisting of hydrogen, halo, C<sub>1</sub>-C<sub>10</sub> alkoxy, amino, C<sub>2</sub>-C<sub>10</sub> alkenyl, and C<sub>2</sub>-C<sub>10</sub> alkynyl, and R<sub>4</sub> is selected from the group consisting of R- and S-1-phenylethyl, an unsubstituted benzyl group, and a benzyl group substituted in one or more positions with a substituent selected from the group consisting of C<sub>1</sub>-C<sub>10</sub> alkyl, amino, halo, C<sub>1</sub>-C<sub>10</sub> haloalkyl, nitro, hydroxy, acetamido, C<sub>1</sub>-C<sub>10</sub> alkoxy, and sulfo.

76 (Previously Presented). A method according to claim 75, wherein said active ingredient is an A3 selective A3RAg that is selected from the group consisting of those of formula (IV) in which:

R<sup>a</sup> and R<sup>b</sup> are the same or different and are selected from the group consisting of hydrogen and C<sub>1</sub>-C<sub>10</sub> alkyl, and R<sub>2</sub> is hydrogen or halo;

R<sup>a</sup> is hydrogen, R<sub>2</sub> is hydrogen and R<sub>5</sub> is unsubstituted benzyl;

R<sup>b</sup> is C<sub>1</sub>-C<sub>10</sub> alkyl or C<sub>3</sub>-C<sub>10</sub> cycloalkyl and R<sub>5</sub> in R- or S-1-phenylethyl or a benzyl substituted in one or more

positions with a substituent selected from the group consisting of halo, amino, acetamido, C<sub>1</sub>-C<sub>10</sub> haloalkyl and sulfo, wherein the sulfo derivative is a salt;

R<sub>2</sub> is a C<sub>2</sub>-C<sub>10</sub> alkyne of the formula R<sup>d</sup>-C=C- where R<sup>d</sup> is a C<sub>1</sub>-C<sub>8</sub> alkyl; or

R<sub>2</sub> is a halo, C<sub>1</sub>-C<sub>10</sub> alkylamino, or C<sub>1</sub>-C<sub>10</sub> alkylthio, R<sup>a</sup> is hydrogen, R<sup>b</sup> is C<sub>1</sub>-C<sub>10</sub> alkyl and R<sub>5</sub> is a substituted benzyl.

77 (Previously Presented). A method according to Claim 54, wherein said active ingredient is an A3 selective A3RAg that is selected from the group consisting of those of formula (IV) in which:

X<sub>1</sub> is R<sup>a</sup>R<sup>b</sup>NC(=O), wherein R<sup>a</sup> and R<sup>b</sup> may be the same or different and are selected from the group consisting of hydrogen, C<sub>1</sub>-C<sub>10</sub> alkyl, amino, C<sub>1</sub>-C<sub>10</sub> haloalkyl, C<sub>1</sub>-C<sub>10</sub> aminoalkyl, and C<sub>3</sub>-C<sub>10</sub> cycloalkyl, R<sub>2</sub> is selected from the group consisting of hydrogen, halo, C<sub>1</sub>-C<sub>10</sub> alkoxy, amino, C<sub>2</sub>-C<sub>10</sub> alkenyl, and C<sub>2</sub>-C<sub>10</sub> alkynyl, and R<sub>4</sub> is selected from the group consisting of R- and S-1-phenylethyl, an unsubstituted benzyl group, and a benzyl group substituted in one or more positions with a substituent selected from the group consisting of C<sub>1</sub>-C<sub>10</sub> alkyl, amino, halo, C<sub>1</sub>-C<sub>10</sub> haloalkyl, nitro, hydroxy, acetamido, C<sub>1</sub>-C<sub>10</sub> alkoxy, and sulfo.

78 (Previously Presented). A method according to claim 77, wherein said active ingredient is an A3 selective A3R<sub>Ag</sub> that is selected from the group consisting of those of formula (IV) in which:

R<sup>a</sup> and R<sup>b</sup> are the same or different and are selected from the group consisting of hydrogen and C<sub>1</sub>-C<sub>10</sub> alkyl, and R<sub>2</sub> is hydrogen or halo;

R<sup>a</sup> is hydrogen, R<sub>2</sub> is hydrogen and R<sub>5</sub> is unsubstituted benzyl;

R<sup>b</sup> is C<sub>1</sub>-C<sub>10</sub> alkyl or C<sub>3</sub>-C<sub>10</sub> cycloalkyl and R<sub>5</sub> in R- or S-1-phenylethyl or a benzyl substituted in one or more positions with a substituent selected from the group consisting of halo, amino, acetamido, C<sub>1</sub>-C<sub>10</sub> haloalkyl and sulfo, wherein the sulfo derivative is a salt;

R<sub>2</sub> is a C<sub>2</sub>-C<sub>10</sub> alkyne of the formula R<sup>d</sup>-C=C- where R<sup>d</sup> is a C<sub>1</sub>-C<sub>8</sub> alkyl; or

R<sub>2</sub> is a halo, C<sub>1</sub>-C<sub>10</sub> alkylamino, or C<sub>1</sub>-C<sub>10</sub> alkylthio, R<sup>a</sup> is hydrogen, R<sup>b</sup> is C<sub>1</sub>-C<sub>10</sub> alkyl and R<sub>5</sub> is a substituted benzyl.

79 (Previously Presented). A method for inhibiting abnormal cell proliferation in a subject in need thereof, comprising administering to the subject an adenosine A3 receptor agonist (A3R<sub>Ag</sub>) in an amount of less than 100 μg/Kg body weight.

Appln. No. 09/700,751  
Amdt. dated August 30, 2005  
Reply to Office action of June 8, 2005

80 (Previously Presented). A method according to  
Claim 79 wherein the amount of the A3RAg is less than 50  $\mu\text{g}/\text{kg}$   
body weight.